

§ 761.346

40 CFR Ch. I (7–1–14 Edition)

§ 761.346 Three levels of sampling.

To select a sample of the waste and prepare it for chemical extraction and analysis, there are three required levels of random sampling.

(a) First, select a single 19-liter (5 gallon) portion from a composite accumulated either contemporaneously with the generation of the waste or by sampling an existing pile of waste. Collection procedures for the first level of sampling from existing piles of waste are in § 761.347. Collection procedures for the first level of sampling from a contemporaneous generation of waste are in § 761.348. Compositing requirements and requirements for the subsampling of composite samples to result in a single 19-liter sample are in § 761.350. Send the 19-liter sample to the laboratory for the second and third levels of sampling, including particle size reduction for leach testing and drying as required by § 761.1(b)(4).

(b) Second, at the laboratory, select one quarter of the 19-liter sample. Procedures the laboratory must use for this second level of sample selection appear in § 761.353.

(c) Third, select a 100 gram subsample from the second level subsample. Procedures the laboratory must use for this third level of sample selection appear in § 761.355.

§ 761.347 First level sampling—waste from existing piles.

(a) *General.* Sample piles that are either specifically configured for sampling (see paragraph (b) of this section) or that are of conical shape (see paragraph (c) of this section). If sampling from either of these shapes is not possible, conduct contemporaneous sampling, in accordance with the procedures in § 761.348, or obtain the approval of the Regional Administrator for an alternate sampling plan in accordance with § 761.62(c).

(b) *Specifically configured piles.* A specifically configured pile is a single flattened pile in the shape of a square or rectangle having no restrictions on length or width but restricted to 30 cm (1 foot) in depth. A square shaped pile facilitates sampling site selection for the first level sample. Select eight 19-liter samples from the pile and com-

posite them into one 19-liter sample as follows:

(1) Divide the pile into quarters.

(2) Divide each of the quarter sections into quarters (i.e., into sixteenths of the original pile).

(3) Select two sixteenths from each of the four quarters, according to one of the two following options:

(i) Randomly select the two sixteenths from one quarter and sample the sixteenths occupying the same positions in each of the other three quarters.

(ii) Randomly select two sixteenths from each of the four quarters (i.e., perform a random selection four different times).

(4) At this point the eight selected sixteenths undergo further division and sample selection. Divide each of the eight selected sixteenths into four equal parts. Using a random number generator or random number table, select one of the four equal parts from each of the eight equal areas. If each of the four equal parts has a volume >76 liters when projected downwards 30 cm, continue to divide each selected area into four equal parts, and select one of the parts, until each selected area has a volume of <76 liters but ≥19 liters. When projected to a depth of 30 cm, a square having a 25 cm side or a circle having a diameter of approximately 28.5 cm equals a volume of approximately 19 liters. The volume of 76 liters is equal to the volume enclosed by a square having a side of 50 cm (or other shape having an area of 250 cm²) projected to a depth of 30 cm.

(5) Take one sample of approximately 19 unsorted liters of waste from each of the eight selected areas. Place each sample into a separate 19-liter container, allowing only sufficient space at the top of the container to secure the lid.

(6) Composite the eight 19-liter samples in accordance with § 761.350.

(c) *Conical-shaped piles.* If it is necessary to sample a pile which is too large to be spread on the site to a uniform thickness of 1 foot or 30 cm, or if there are too many piles to spread out in the space available, use the following procedure to sample the piles. This procedure assumes that the shape of the piles is analogous to a cone; that